

Abstract of the Disclosure

A linear amplification with nonlinear components (LINC) power transmitter is provided. The LINC power transmitter includes a digital signal processing unit which controls the LINC power transmitter; a frequency modulation unit which  
5 modulates or converts a digital signal output from the digital signal processing unit into a radio-frequency (RF) signal; a signal amplification unit which amplifies the RF signal output from the frequency modulation unit using a gain amplifier and a power amplification module; and a direct current/direct current (DC/DC) conversion unit  
10 which controls bias of the power amplification module. Here, the DC/DC conversion unit controls a base bias and/or a collect bias of the power amplification module, and the power amplification module operates in saturation.